

REMARKS

This amendment is responsive to the Final Office Action mailed October 30, 2008 wherein the Examiner stated that claims 1-6, 8, 10, and 11 were rejected under 35 USC §103 (a) as being unpatentable over Williams (U.S. Patent 4,885,827) in view of Zhang (U.S. Patent Appl. Serial No. 2004/0090334 A1); and rejected claims 1-4 and 6-22 under 35 U.S.C. §103(a) as being unpatentable over Galkin (U.S. Patent 6,850,590). In this amendment, independent claims 1, 12 and 15 were amended. No new matter has been added.

Claims 1-22 remain pending in this application. Reconsideration in light of the following remarks is respectfully requested.

In response to the Examiner's rejection of claims 1-6, 8, 10, and 11 under 35 USC §103 (a) as being unpatentable over Williams in view of Zhang, the Applicant respectfully traverses the rejection. Although the Examiner agreed with the Applicants that Williams and Zhang are not analogous to the art of the subject invention, the Examiner concluded that the Applicant's previous arguments were not persuasive based on the Examiner's conclusion that the only tie in the claims to the medical imaging art is in the preamble. The Examiner further concluded that the language in the body of claim 1, "tissue compression membrane suited to minimize image distortion" is functional and therefore the automobile references "still reads [sic] over apparatus claims 1-11." The Examiner did not mention or render any conclusions about the additional language in claim 1 directed at medical imaging, "a plurality of tensioning apparatuses coupled to said membrane to apply a tensile force to said membrane to place said membrane in a taut condition during an imaging process."

With regard to the Examiner's conclusion regarding the sub-element "membrane suited to minimize image distortion", this sub-element is more than mere functional language. It is limiting the membrane to those that are suited to minimize image. By the fact that Williams automobile seat is obviously not suited to minimize image distortion, demonstrates that this is not merely functional language. Further, the term "medical imaging" recited in the preamble is antecedent to the limitation that the membrane is suited to minimize image

distortion to further define this sub-element.

The Examiner also refers to Williams' car seat membrane as a "tissue compression membrane". However, Williams' membrane 40 does not compress any "tissue". Williams' membrane 40 serves to support the car seat covering, Williams membrane 40 does not compress the tissue of a person seated in Williams car seat. Similarly, the Examiner has also previously stated that Williams' "bladders can be adjusted depending on the size and/or shape of the tissue that is to be compressed", referring to col. 3, lines 15-32. However, at col. 3, lines 15-32, the bladders are described as: "the tensioning of membrane 40 by bladder 50 allows the seating height (or fore and aft positions of the seat back 10) of the membrane 40 under a given load to vary..."

The Examiner also did not address the Applicant's argument regarding the combination of Williams and Zhang. As such, the Applicant's reiterate the latter argument, that Williams is directed at a system for supporting a person sitting in a seat of an automobile. The membrane/bladder support method of Williams is designed to support the weight of someone sitting on top of the membrane and, more specifically, to provide a system that enables the person sitting in the seat to adjust the "natural frequency" or spring in the seat. Zhang does not mention any membrane/bladder system, or otherwise disclose any such system or method. Zhang is directed at a system for taking video images of a person's eyes sitting in the driver's seat of an automobile to determine whether the amount of time in which a driver closes their eyes is increasing over time, to assess if the driver is becoming drowsy. It appears that the Examiner cites Zhang to leap frog from Williams' car seat support system to Zhang's video imaging system to the Applicant's tissue compression apparatus. However, Williams' membrane/bladder method for use in a car seat is incapable of operating as a tissue compression membrane apparatus for medical imaging and Zhang does not disclose any element of the subject claims directed at an apparatus for compressing tissue to be scanned for medical imaging.

With regard to claim 5, neither Williams nor Zhang disclose a tensioning device that comprises a movable tension plate responsive to a mechanical command for applying the

tensile force. Although the Examiner has rejected this claim based on Williams in combination with Zhang, it is not known on what structure in Williams or Zhang the Examiner is relying for the movable tension plate.

With regard to claim 10, neither Williams nor Zhang disclose a tensioning apparatus that comprises a means for applying a respective tensile force to the compression membrane along a pair of mutually orthogonal axes that define a plane at least over a portion of the compression membrane. The bladders of Williams' car seat does not apply tensile force to the supporting membrane along a pair of mutually orthogonal axes, most importantly because Williams frame structures for the membrane are only on the right and left sides of the car seat. Williams frame does not have three sides and therefore Williams' tensile force cannot be applied along a pair of mutually orthogonal axes.

Similarly, with regard to claim 11, neither Williams nor Zhang disclose a means for applying the tensile force along the orthogonal axes that includes a means for independently adjusting the magnitude of the tensile force along each of the orthogonal axes, thus allowing to compensate for variation in size and/or shape of the tissue to be compressed. The Examiner has not indicated the structure in Williams or Zhang on which the Examiner relies for the independent adjustment of tensile force along each orthogonal axis. Since Williams only applies force on the membrane that supports the car seat cover along one axis, there does appear to be a basis for concluding that not only is force applied along each orthogonal axis but independently adjustable as well.

With regard to claims 2-4, 6, and 8, for reasons similar to the arguments presented above for claim 1, these claims are patentable over Williams and Zhang.

In response to the Examiner's rejection of claims 1-4 and 6-22 under 35 U.S.C. §103 (a) as being unpatentable over Galkin, the Applicant respectfully traverses the rejection. Galkin's apparatus for x-ray mammography comprises a comfort device comprising a compressible material that is adapted, when filled with air or other fluid like materials, to provide *cushion to the underside of a breast* when seated in Galkin's mammography cassette

holder.

With regard to claim 1, Galkin does not disclose a compression membrane, as evidenced by the fact that Galkin's uses a rigid compression paddle, the problems of which the subject invention is intended to overcome. Rather, the Examiner's rejection is based on equating Galkin's cushion that supports the underside of a breast with the compression membrane of claim 1. Even assuming for the purpose solely of argument, that Galkin cushion is appropriately equated with the compression membrane of claim 1, Galkin does not the other elements of claim 1, "a plurality of tensioning apparatuses coupled to membrane to apply a tensile force to membrane to place membrane in a taut condition during an imaging process; wherein tensioning apparatuses each comprises an inflatable bladder." The Examiner states that Galkin's "membrane can comprise multiple inflatable chambers (bladders) into which a fluid, such as air can be forced", citing the abstract, col. 5, lines 64-66, and col. 7, lines 1-3 to support this conclusion. However, Galkin does not describe such a membrane comprising multiple inflatable chambers. Galkin merely discloses that there can be a "plurality of cushions". (col. 6, lines 66-67) Galkin does not disclose these "plurality of cushions" as being "multiple inflatable chambers" within a "membrane", as the Examiner appears to conclude. At col. 5, lines 64-66, Galkin describes the cushion as stretched over the cassette to ensure the patient-contact surfaces are cushioned, which include the tube-side, out surface, and the first and second sides as further shown in the figures.

In addition, Galkin does not describe the plurality of cushions as further acting to apply a tensile force to a separate tissue compression membrane to place the membrane in a taut condition.

With regard to claim 7, Galkin does not describe a compression membrane with a thickness not to exceed 0.5 mm. Galkin's cushion obviously exceeds 0.5mm and there is no such limitation disclosed in Galkin.

With regard to independent claim 12, in addition to the reasons presented above for claim 1, Galkin further does not disclose a plurality of inflatable bladders that can be individually adjusted to selectively apply differing tensile forces on a compression membrane. Solely for argument purposes, even if Galkin's multiple cushions could be construed as the

membrane or the inflatable bladders, Galkin does not describe these multiple cushions as being separately adjusted.

With regard to claim 14, Galkin does not disclose applying of a respective tensile force along orthogonal axes further comprises independently adjusting the magnitude of the tensile force along each of the orthogonal axes for variation in size and/or shape of the tissue to be compressed.

With regard to independent claim 15, in addition to the reasons presented above for claim 1, Galkin further does not disclose a plurality of tensioning apparatuses coupled to a membrane to apply a tensile force to the membrane to place the membrane in a taut condition during an imaging process; wherein each of the tensioning apparatuses comprises an inflatable bladder responsive to a command for applying the tensile force. Similarly and solely for argument purposes, even if Galkin's multiple cushions could be construed as the membrane or the inflatable bladders, Galkin does not describe these multiple cushions as being separately adjusted.

With regard to claims 17-19, Galkin does not disclose a tensioning apparatus, distinct from a membrane, that comprises at least two tensioning devices arranged on a support frame to apply a respective tensile force to said compression membrane along a pair of mutually orthogonal axes; wherein each of said tensioning devices include a respective tension adjuster for independently adjusting the magnitude of the tensile force along each of said orthogonal axes, thus allowing to compensate for variation in size and/or shape of the tissue to be compressed; wherein each tensioning device comprises a movable tension plate responsive to a mechanical command for applying the tensile force, respectively.

With regard to claim 22 and similar to claim 7, Galkin does not describe a compression membrane with a thickness not to exceed 0.5 mm.

With regard to claims 2-4, 6, and 8-11, 13, 16, and 21, for reasons similar to the arguments presented above for claims 1, 12 and 15, these claims are patentable over Williams and Zhang.

In view of the foregoing reasons set out above, Applicants respectfully submit that the application is in condition for allowance. Favorable reconsideration and prompt allowance of

S.N. 10/723,318

135858

Response to Final Office Action with Notice of Appeal

Date of Final Office Action: October 30, 2008

Conf. No. 9461

the application are respectfully requested.

If the Examiner believes that anything further is needed to place the application in condition for allowance, the Examiner is requested to contact Applicants' undersigned representative at the telephone number below.

Respectfully submitted,

/JENIFER HAECKL/

JENIFER HAECKL
Registration No. 41,812

General Electric Company
Building K1, Room 3A62
Niskayuna, New York 12309

March 26, 2009

Telephone: (518) 387-6191 or
(518) 387-5135